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The New Country page 6

February, 1964

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THE EDITOR'S COLUMN

Who needs women?

This statement is sufficient to make one stop and think about the role of women in our Canadian economy and their effect on what may happen in the non-urban economy.

Developing the human and economic resources in a community is not a one-man job. This we all realize. In many cases, though, rural development is confined to a men-only discussion. In Eastern Canada, the only organization that has spent any time in studying redevelopment of rural areas is the Women's Institutes. The W. I. can list many accomplishments in community development . . . they have a good record. Today, though, as never before, their experience and understanding is needed in order that the necessary adjustments in our manner of rural living might take place in the least painful manner.

Women are psychologically different from men. They have a different set of values. They have greater insight into the problems of readjustment. In many cases, the women in a rural community have better educations than their male counterparts.

Community development must have many aspects if it is going to serve the varied interests of an area. It appears, from what is happening in Eastern Canada, that the men who are taking the active leadership role are more interested in economic development of a region. The men are more interested in the opening of new recreation areas. They are the ones asking for better highways, land zoning, financial assistance for attracting new industries and better terms of farm credit. Women are more interested in the human resource. They are more concerned about the need for better educational facilities, more health services, better librairies, more cultural services, consumer information and leadership development.

In most cases, women have more uncommitted time which they are able to devote to community activities. As demonstrated in many organizations, they are loyal, hardworking committee members who get the job done. They are energetic volunteers; they are considered better than men in conducting surveys and asking questions. Despite this, we rely on men to conduct our initial surveys of a community, surveys that form the basis for future development plans.

In Rural Areas Development program in the United States, women in rural communities are making a great contribution to the analysis of community problems and plans to remedy them. In Casey, Floyd, and Wolfe Counties in the State of Kentucky, women are chairmen of the County Development Associations. In Callhoun County, Mississippi, one-fourth of the rural development board is made up of women.

Here in Canada, it appears that rural development is a man's world. When organizations are approached for assistance in planning rural development, the women's organizations are rarely consulted.

Women do have a big role in rural development in Canada. Women are basically good planners; they have patience and don't mind waiting for a project to be completed. Women are not afraid to try new ideas, they are better speakers and their knowledge of parliamentary procedure puts most men to shame.

There's a job to be done with rural development in Canada. When there's a job to be done, we should look around for the women to help in doing it, rather than ignoring their presence.

Who needs women? We all do. Now as never before

Mark Waldron



CANADIAN COUNCIL OF RESOURCE MINISTERS: At the Second Plenary Session of the C.C.R.M. at Montreal in November. From left, John Turner, Parliamentary Secretary to Minister of Northern Affairs & Natural Resources; Hon. Hedard Robichaud, Federal Fisheries Minister; Hon. J. W. Spooner, Ontario Municipal Affairs Minister and Hon. L. F. Rossiter, P.E.I. Minister of Industry & Natural Resources.

SOME TWO YEARS AGO, Governor-General Georges P. Vanier faced an audience of 700 Canadians in Montreal's Queen Elizabeth hotel.

"In the eyes of humanity, you are architects planning now for future generations," he declared. "You are stewards on behalf of unborn millions."

These were inspiring words for the delegates attending the opening ceremonies of the historic Resources for Tomorrow Conference. Faced with the challenge presented by His Excellency, the delegates spent the next six days in serious contemplation of the problem that brought these representatives of government, industry, educational bodies and interested individuals together: how to begin the formidable job of restoring Canada's renewable resource house to order.

From the workshops and plenary sessions emerged two important conclusions. It first became clear that lack of coordination between governments and between government departments within governments had resulted in confusion and waste in resource development, administration and management.

At the same time, delegates acknowledged that under the existing system of Canadian federalism, ownership of natural resources largely rests with the provinces, while fiscal, monetary and trade policies are the responsibility of the federal government.

The delegates were made aware of the relationship of fiscal, monetary, tariff and trade policies to resource development, and at the same time they recognized the need for an orderly interchange of views from experts in all the resource sectors throughout Canada

It was obvious that some permanent organization was necessary to assume

the responsibility of a continuing review of resource problems and policies among the senior governments.

This awareness was also quite obvious to members of the conference steering committee. At its final meeting in Ottawa on February 6, 1962, the committee agreed to the formation of a permanent resource ministers' council. The conference advisory committee was charged with the preparation of the first council meeting.

The Canadian Council of Resource Ministers formally came into being in Toronto on September 21, 1962. At the same time, approval was given to the establishment of a permanent secretariat in Montreal. Mr. Daniel Wermenlinger, a Montreal consulting engineer, was chosen from among 60 applicants to become the council's first Secretary-General. He assumed his new duties last August 15, and immediately began organizing the secretariat's head-quarters, at 75 Dorchester Blvd. W.

Montreal was chosen over the federal or provincial capitals to remove any suggestion of domination or supervision by any of the 11 governments. The Secretariat staff will remain a compact unit of no more than 15, including administration, information and education officers, and resource economists.

The council itself is composed of a resource minister from each of the federal and provincial governments, all sitting at the council table as co-equals. The chairmanship rotates annually. Hon. René Lévesque, Quebec's Minister of Natural Resources, and the current chairman, will be succeeded March 31 by Hon. L. F. Rossiter, Prince Edward Island's Minister of Industry and Natural Resources.

The council plans to meet at least twice annually, in Montreal and in the

Resource Management —

A NEW FORMULA

by Walter Gray

province of the current chairman.

Continuing liaison with the Secretariat is provided by a three-man executive committee, composed of the current, past and incoming chairmen. An advisory committee, consisting of a resource specialist appointed by each minister, meets frequently during the year to lay the groundwork for future ministerial deliberations and decisions.

The council, holding its second plenary session in Montreal last November, set out its primary function. It was agreed that, in general, legislation, programs and agreements on resources should be reviewed insofar as possible by the council. It was recognized that where the federal government is party to these with one or more provincial governments, reference to the council is particularly important.

The ministers also saw an advantage in submitting, as well, interprovincial resource agreements to the council so that the council may fulfill its advisory and consultative role.

The council approved a broad program for the coming year. It instructed the Secretariat to proceed with a general review of all joint programs already implemented in the various fields of renewable resources.

The review of such programs as ARDA, forestry, fisheries and wildlife agreements, got under way directly after the New Year, and is expected to be completed before the council holds its next plenary session in Charlottetown in the late Spring.

The review is in line with one of the key recommendations to emerge from the Resources for Tomorrow Conference. It is hoped that the review will

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the new country

by Noel Moore



In recent months there has been a new awareness of the natural resources in this country, especially the agricultural resources. Because of the importance of the management of our resources to achieve most efficient production, Macdonald College in co-operation with the Canadian Broadcasting Corporation is presenting a special television series commencing this month. The initial seven programs to be telecast Friday noons at 12:00 starting on Friday, February 7, 1964 will deal with soil, water, crops, livestock, people and the future. Guests will include several staff members from the college as well as selected experts from various government departments and industries. In addition, several farmers from the telecast area will be presenting their ideas on resources — for the future.

This is the first such series presented in Canada and the second attempt by Macdonald College to extend their information by means of television. As indicated by this article, considerable research is required to present such a series. There is so much that can be said, yet we have to limit the content of the series to the most important aspects of resources. We hope that you will join us each Friday at twelve noon for this special television series. Additional material will be available from the college to assist you in a better understanding of agriculture as we approach the various topics covered in the television programs.

THE GRASS IS STILL as green—
the trees as lovely as they were
when the first settlers arrived, but the
country itself is strange and new. It
seems to lie somewhere between the
twilight zone and the outer limits of
the science fiction territory.

To the scientist and the farmer, the peaceful countryside of Quebec and Ontario, is the fringe — the border area, mid way between yesterday and tomorrow, ignorance and knowledge, famine and plenty. And it's all the stranger because the story here is based on science fact — and not science fiction.

Starting February 7, the Macdonald College Extension Service and the Canadian Broadcasting Corporation, will commence a series of seven half hour programs outlining and explaining the silent revolution that is taking place in Canadian agriculture.

The programs will illustrate the Canadian farm as it is today, a big business, where efficiency counts most, a way of life unrecognizable to the farmer of 20 years ago, an industry beset with problems, change and paradoxes.

A world where beef is tenderized on the hoof, where electronic computers help produce more milk and beef and psychiatrists are experimenting with the hidden powers of the subconscious mind in plant growing.

Using film and interviews with the experts from McGill's Faculty, of Agriculture the programs will outline the extent of the silent revolution in Cana-

dian agriculture and show what is being done to educate the farmer to an awareness of the situation and what he can do to meet it.

The enemies in this "new country" are not little green men from Venus or bug eyed monsters from Mars. The enemy is people. Super highways, spreading urban tissue out into the countryside, and ever growing cities, have upset the balance of rural life and destroyed the traditional cycles.

The highways open the farm areas to land speculators and raise the value of farm lands to the level where agriculture becomes financially impractical. And the cities cover the water catchment areas and pollute the rivers and streams, lowering even Canada's vast water resources, to the danger level.

The farmer, or l'Habitant has always been the folk image of the ideal Canadian, self reliant, hard working and thrifty. Full of rustic wisdom and simplicity he has been generally depicted as a somewhat comical figure who sowed and reaped his crops according to whim, instinct or various almanacs and soothsayers.

Nothing could be farther from the truth. To survive on the land today the farmer must combine the instincts and abilities of a corporation executive with the skills of an engineer and the respect for data of a statistician. He makes genetics, physics, chemistry, mathematics and economics work for him, he uses an electronic computer instead of an extra herdsman. He has adapted to changing times and has learned how to use the knowledge and skills developed at such centres as Macdonald College.

The corny country cousins of yesteryear have all headed for the cities. They were among the 200,000 farmers who fled the land in the past 20 years

and they will shortly be joined by the 133,000 who now sell less than \$1,200 worth of produce a year.

Few Canadians realize that the country is now in the midst of one of the greatest social upheavals in its history. The flight from the land has already involved more people than any of the mass migrations of the past centuries. The refugees from the silent revolution are streaming into the cities in ever increasing numbers.

Caught between the millstones of ever increasing costs and ever lowering prices, the farmer has become grist to the economic mills of the cities. To survive on the land, and to feed an ever expanding urban population, the farmer must throw tradition to the wind and literally project himself into the future, he must become one of the 25 per cent who account for 75 per cent of all agricultural production in Canada today.

The farmer of the "new country" is a supreme realist — he has to be. He put old Dobbin out to pasture long ago and regards his cattle and sheep as so many biological conversion units who transform fodder and other feed into beef, mutton and wool.

Each program of the series will concentrate on a single topic, running the gamut from soil and water through crops to livestock and people. They will feature the farmers who are caught up in the revolution as well as the Macdonald College scientists who are working to solve the problems.

Soil management, minimum tillage, long range weather prediction and

drainage to move forward the growing season in Canada will all be explored on the first few programs, through interviews with Dr. B. P. Warkentin and Dr. A. F. Mackenzie of the Department of Soil Science and through the use of film illustrating what is being done in this area.

The principles of maximum energy exposure, fertilization, moisture control, soil maps and bacteria, water management and supplemental irrigation are some of the areas which will be covered.

In the crops section, experts such as Professor H. A. Steppler will illustrate the vital role of the agronomist in the production of food. Since green plants are the biological organisms capable of using the energy of the sun plus raw materials from the air and soil to manufacture food, they must be made as efficient as possible through experimentation and research.

Why do farmers in Quebec insist on growing oats to feed livestock when experience proves they lose one crop in four because the stalk is too weak? Why not switch over to wheat which can survive the worst that this province's weather man can throw at it and at the same time provide a third more feed potential per acre?

Or why do local farmers insist on boasting about 400 pounds of butter fat per cow instead of, as in New Zealand, talking about 350 pounds of butter fat per acre? "People in Canada have a hay philosophy," says the Department of Animal Science. "Whoever heard of a farmer boasting how much

hay his mower cut."

Agriculture on the family farm means getting maximum use of forage for maximum conversion into food for human consumption. It means the interrelation of land, labor and cost of production.

Science, to the men at Macdonald, and the farmers who keep informed on the latest developments means many things, all of which will be explored on the series.

It means lowering of the fat content in milk and eggs through selective feeding and breeding. It means mechanization, bulk tanks and vacuum milking. It's a group of Ormstown farmers breeding their cows on the advice of an electronic calculator, which judges a bulls breeding potential not by ancestry, but through posterity.

It means new varieties of grain through dramatic juggling of chromosomes, scientific pest control, adapting animals to the environment. It means thousands of scientific experiments that have helped a farmer of today produce

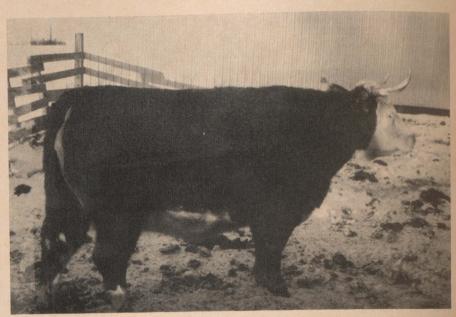
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Beef Farm

by Walker Riley



This is the type of animal Albert Lagrande keeps for his breeding herd. Good hay and silage provide adequate maintenance.

With an uncertain milk market and a shortage of help, many dairy farmers have wondered at some time if they would be better off in beef. Here is the story of one man who made the change.

EVER GET TIRED of milking cows twice a day, seven days a week, 365 days a year? Albert Legrand did, and this is what he did about it. He switched to beef.

Now, seven years later, Albert can look back on his success and his mistakes, and he is willing to share his experience with others.

Albert farms 325 acres of beautiful, rolling Compton County south of Sherbrooke. From high on the hill where the springs arise which water the farm, one can look down across highway 22, across the attractive grounds of the farm buildings, across the 125 acres of cultivated fields, across the sugar maple woods and the spruce swamps to the mountains of Vermont in the south and to Mount Orford in the distant west.

The beauty of the place no doubt influenced Albert and his wife Lorraine in their choice of a farm eleven years ago. Though both were raised in town, they have the love of the soil and of the country so typical of life-long farmers. For them, and for Michael, age seven, and for Louise, three, it is home.

But Albert never did learn to enjoy

milking the cows he bought with the farm. It was his intention from the start to go into beef; after three years, he sold the dairy herd down to the last animal. In their place, he bought locally a few good grade Hereford cows. Before long, he hopes to reach seventy head.

It is at this point that Albert offers his first emphatic bit of advice to the prospective beef man. "Take it slow," he says, "Don't make your change-over all at once, like I did. You are going to need two, probably three, beef cows to give you the same income as one dairy cow. And don't forget, your cheque comes in only once a year!

The switch to beef required changes in the buildings. On the west side of the stable yard, he put up a pole-type, metal covered structure for winter shelter. It has sliding doors which are closed during storms; the cows choose to stay out of doors whenever the sun is shining. The cost was \$2500, or just over \$1.00 per square foot floor space. Allowing 45 square feet for each cow, it should accommodate 50 head. When expansion is required, the end wall can be easily moved.

The need for space in the bedded area is reduced by having the feeding area entirely separate. The cows have to walk across the yard to the feed racks against the old barn. Albert finds two feet of manger space is enough for each cow if hay is in front of them all the time.

On the south side of the yard, he has built a 45 x 12 horizontal silo out of scrap lumber. He uses a forage blower to fill it to a depth of seven feet, and levels the corn silage with a tractor. Plastic sheeting, weighed down with a layer of straw bales, reduces top spoilage to a minimum. This year, he is forking the silage into bunks, but next winter hopes to try self-feeding gates at both ends.

Half of the old dairy stable is now converted to pens where 125 market hogs, purchased as weaners, are finished at one time. Albert points out that, since the labour requirement for beef is so much less, he has time for a second enterprise.

The other half of the stable is being used for steer feeding trials under contract with the Cooperative Fédérée de Quebec.

With the exception of a few heifers kept for breeding, all the calves are sold as stockers in the fall. Born in March, they are ready to go sometime in October. With each calf worth \$100, and the cost of keeping a cow for a year about \$50. Albert looks for a profit for his labour of roughly \$50 each.

What about markets? He is optimis-

tic there. With one half of Quebec's beef imported, and with Ontario buyers passing the door on their way to the Maritimes to purchase stockers and feeders, he looks for a bright future. Last year, he sold his calves at Sawyerville's first annual feeder cattle sale, twelve miles to the east. He expects this outlet to develop as the sale becomes better known.

For a beef set-up, the cropping system on the Legrand farm is rather unique. It shows the influence of Albert's dairy experience — he has set aside four of his best fields near the buildings for pasture. His reasons? To avoid crossing the highway with cattle, to keep an eye on the stock, and because he feels that good pasture is a key to top-priced calves in the fall. Each section is broken only when necessary and reseeded, well fertilized, in the same year. The companion crop of oats is grazed off.

On the rest of the farm, he runs a standard rotation of corn for silage, oats seeded down, then two or three years hay. He plans in the future to increase the corn acreage, to plant only enough oats to provide the necessary 3 or 4 bales of straw for daily bedding, and to stretch the number of years in hay.

Like most of the soils in Compton County, the Legrand farm is too acid yet to grow alfalfa — some fields are as low as 4.9 pH. Albert has been over the entire farm once with ground limestone, and is now on the second round. When the acidity is almost neutralized

(pH 6.0 - 6.5), he is sure that alfalfa will grow for him there. Each ton costs him \$2.35 with an extra charge of \$3.00 a truckload to spread it on the field. The provincial government pays the transportation to the farm plus a 50 cent per ton rebate.

Albert has his own solution to the high cost of machinery. He does not buy any. Or at least, he has equipment only for those jobs he cannot hire done. He has his own having machinery — "hay quality is too important" - his own six year old tractor, and a three furrow plough. Very little else. "For \$6 an hour, and a total bill of \$36, I can hire my neighbour to do my seeding. That would not pay the interest on a new, thousand dollar drill, let alone depreciation an upkeep," Albert declares. By the same reasoning, he figures it is cheaper to have someone else plant the corn, fill the silos, and combine the grain.

For the dairyman who wants to move into a cow-calf beef operation, Albert has some suggestions. "Make your change slowly and feel your way into the beef business. Select your best dairy cows to keep, and trade the rest for bred beef heifers or older cows. Pick good growthy animals that will wean a 450 lb. calf in 61/2 months. Use A.I. until the herd is big enough to pay for a bull. Make full use of pasture, good hay, and corn silage. No grain. Keep the investment in buildings and machinery to a minimum. Plan for at least seventy brood cows. And watch the markets.'

It's as easy as that — or is it?

A view across the Lagrande farm. The horizontal silo is on the left, and the loose housing barn on the right.





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Vitamin "C"

by Marion Zakardas
School of Household Science
Macdonald College

WHAT IS VITAMIN "C" and why is it so important?

Vitamin "C" or ascorbic acid is a substance found in several foods. It is extremely important for health.

Its main role is as a cementing substance between the body cells and the tissues of the bones and teeth. One of the first signs of a Vitamin "C" lack is bleeding of the gums. If the lack progresses, the disease scurvy develops. This disease is marked by skin and bone hemmorrhages, resulting from the increased fragility of the blood vessels. The only animals which develop scurvy are man, monkeys and guinea pigs. Other animals need Vitamin "C", too, but are able to produce their own. Historically, this disease of scurvy was important since it was common on many of the early explorations of the world, including Jacques Cartier's trip to Quebec in 1534. On this trip, many of his crew died of scurvy; many also were cured because a friendly Indian told them of an infusion of spruce bark in water which would cure them. The reason, of course, was that it contained enough Vitamin "C" to overcome the disease. Although cases of scurvy are not common in Canada today, many people do suffer from mild deficiencies.

Deficiencies develop if a person is not eating enough Vitamin "C" containing foods daily, since ascorbic acid, unlike some of the other vitamins, cannot be stored to any extent in the body.

To ensure an adequate intake, Canada's Food Guide recommends including a satisfactory source of Vitamin "C", such as oranges, tomatoes or vitaminized apple juice daily. There are other foods common in the Canadian diet which contain Vitamin "C". They include lemons, grapefruit, fresh or

frozen strawberries, fresh melons, including canteloupe and watermelon. It may be surprising to note that potato and raw cabbage are also relatively good sources of Vitamin "C". One food recommended during the war when citrus fruits were scarce was rosehips, which are an excellent source of Vitamin "C".

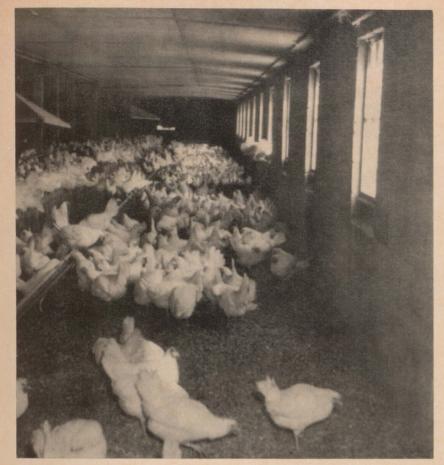
It is not enough though to say that these foods are good sources without adding the qualifying statement, "if they are properly stored and prepared."

Vitamin "C" is one of the most unstable vitamins. It is very soluble in water and is readily destroyed by heat and oxidation. If, for example, frozen orange juice is allowed to defrost, then it is diluted with water and left at room temperature for 24 hours, it can lose as much as 60% of its Vitamin "C" content.

Similar losses occur when any of the other Vitamin "C" containing foods are improperly cared for. As a guide to handling foods containing ascorbic acid, remember its chemical properties—that Vitamin "C" is water soluble and is readily destroyed by heat and air.

A few tips include — 1) Store Vitamin "C" containing foods in the refrigerator. 2) It is wise to prepare the foods as close to serving time as possible. 3) Always use a sharp knife to cut the fruits or vegetables so they are not bruised or mashed. 4) If the food is to be cooked, e.g., potatoes or cabbage, cook in a small amount of water for as short a time as possible, then use the cooking water if possible for soup or gravy.

These simple rules of preparation aid not only in the retention of Vitamin "C" but also of other vitamins and minerals that these foods contain.



MODERN FLOCK MANAGEMENT — LARGE UNITS OF HEALTHY
BIRDS OF HIGH PRODUCTIVITY

FEED ADDITIVES and POULTRY FEEDING

N. Nikolaiczuk

Progress invariably introduces changes — The use of feed additives has aroused controversy but, in turn, has contributed substantially to work efficient poultry production.

THE VETERINARY DRUG ENCYCLOPEDIA lists sixty-two separate and distinct feed additives, approved for use in animal feeds in the United States. The same is essentially true for Canada.

It is only natural then that the farm public raise questions about the feed additives in the poultry feeds that it buys.

What are these feed additives? Why are they added? What are their effects upon birds? Are there tolerance levels set for each? There is no reason for alarm despite the confusing and confounding names because their use has

been approved by competent governmental agencies and each additive is included to serve a specific role and function.

All commercial feeds must, by law, be registered with the Plant Products Division of the Canada Department of Agriculture each year. Of some 10,000 feeds registered annually, about one-half are poultry feeds for chickens and turkeys. Currently, approximately one-third of the chicken feeds are registered as medicated whereas one-half of the turkey are similary designated. It is therefore little wonder that names foreign to common usage should ap-

pear with such frequency on the feed ingredient list on the tag or bag. In fact, several compatible additives may be listed as present in the same bag. The reason for this stems from the different functions that each performs. They are not nutrients but are able to contribute to better ration utilization. Feed additives, by virtue of their purpose and function, can be classified as follows:

Binding agents: — relatively inert materials which possess the common property of adhesiveness to permit the manufacture of a hard durable pellet or crumble texture.

Antioxidents — not all nutrients are stable substances. Some, particularly the vitamins, are destroyed by heat, the presence of moisture, storage, etc., through the process of oxidation. Antioxidents retard this destructive process so that feeds retain a higher concentration of these essential but unstable nutrients.

Growth Promotants — Antibiotics and arsenical compounds are included in this group and their function is to promote growth. These additives are fed for this purpose at low levels on a continuous basis as part of the regular feed, usually in the growing feeds.

Medicants — Here again antibiotics and arsenical compounds are common additives but, in contrast to their usage above, are included in high concentration for short duration of feeding with the express object of controlling a disease already present. Nitrofurans are added with the same objective. In addition, there are available coccidiostats for the control of Coccidiosis in chicks and broilers and histostats for the control of Blackhead in turkeys. These are specific medicinal additives which at prescribed levels will either prevent or control the respective diseases. Worming agents, either for continuous feeding or curative dose treatments, are available for feed use.

This is but a brief list of the more common feed additives because within each group there may be several competitive products. Before approval for feed inclusion is granted, proof of efficacy, bird tolerance, absence of harmful tissue or product residues and compatability of one with another is required. Each product is studied intensively for function and safety at accepted levels of usage must contribute its bit to the improvement in the efficiency of poultry production before acceptance. The contribution of poultry feed additives in the last decade has been immense and without these props the poultry industry, as we know it, could not survive.

Compiled by T. Pickup of the Information and Research Service,

Quebec Department of Agriculture and Colonization.

This month in the

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What is a profitable cow?

PHOTOGRAPHS BY OMER BEAUDOIN



"All flesh is grass". Good forage saves feed for these beef cattle on the farm of Gerard Tardif of Ste-Julie, Megantic.

GOOD FORAGE SAVES FEED

Hay and pasture, and ensiled grasses and legumes ought to be the cheapest feedstuffs on Quebec farms. Unfortunately, many people apparently do not fully understand how to use them as such. Dr Clément Rodrigue has the following remarks to make on this subject.

The energy content ("quality") of hay and silages, and the amounts of such fodder that livestock will eat, decreases with maturity at cutting time. In other words, the more advanced the stage of development reached by forage plants before they are cut, the more it will cost the farmer to make up for their deficiencies, and maintain the desired level of production of his animals by feeding them more expensive feed-stuffs.

Young pasture plants are reasonably rich in proteins and mineral substances, and yield a fair amount of energy when digested by livestock. Intensive and rational grazing and suitable fertilization will maintain their feeding and nutritive value at a comparatively high level.

Generous application of commercial fertilizers followed by intensive grazing will also make it possible to renew or revive old pastures which are difficult to plough or harrow.

Many cooperatives and individual farmers make up meal for livestock according to balanced formulas. If they follow the recommendations of specialists in animal nutrition, the results they obtain will in general be more than satisfactory, providing that this good feeding is backed up by good breeding and management.

As the knowledge and techniques of the science of animal nutrition are developing rapidly, those who keep livestock and operate cooperative feedmills will find it to their advantage to allow themselves to be guided by experts in animal husbandry who have made a special study of the feeding of livestock with a view to increasing its efficiency and lowering the cost of transforming feedstuffs into meat or milk.

Agricultural Rehabilitation and Development Act

The second of three articles about ARDA

In an earlier article bearing the above title (Macdonald Farm and Home Journal, January 1964) it was pointed out that: (1) in many farming areas of Canada, conditions are unsatisfactory - indeed some economists speak of "rural slums"; (2) these conditions are partly due to past errors, including waste, misuse, and underdevelopment of land and other natural resources and, worse still, of human ability and effort - errors now being paid for by farmers who find themselves unable to raise produce competitively at present prices with their present land and equipment; (3) in a prosperous Canada and a half-starved world, and with ample farming technique at our finger tips, this state of affairs is inappropriate, and (4) something can and should be done about it, preferably on the initiative of the people primarily concern-

BASIC PRINCIPLES

ARDA was devised to provide the people of Canada with an effective and democratic means of planning and accomplishing this "something". A general outline of the principles governing ARDA was given to Parliament by Mr Alvin Hamilton in 1961. Briefly, these principles are as follows:

a) While the program is focussed mainly on farm people, it cannot be exclusively agricultural. Rural economies are no longer separate from urban economies, and the program must be one of development embracing local population centres as well as the farms surrounding them;

b) The program should be regarded as long-term rather than short-term, since many of the problems to be encountered are structural rather than either cyclical or transitory;

c) The program should have two levels — local planning and action according to local resources and conditions, under the all-embracing framework of the national joint provincial-federal committee. For, while success depends on local leadership, national direction is essential for research, assistance in selecting personnel, financing, and co-ordination of plans of local projects, and in order to make generally available the benefits of experience gained locally;

d) The cooperation of provincial governments, universities, farm organizations and other bodies is essential, but it is important that the national directorate take the lead in co-ordinating their activities:

e) The program may at times be closely related to others such as the Prairie Farm Rehabilitation Act, the Maritime Marshland Rehabilitation Act, and the Farm Credit Corporation, as well as to provincial extension and educational programs;

f) It must be recognized at the outset that the problems of marginal development and of programs devised to relieve these problems will be social as much as economic, political or technological. This in itself makes it necessary to regard the program as a long-term one and to recognize the difficulties it will encounter.

OBJECTS AND MEANS

Briefly, ARDA has three main objectives: to develop alternative uses for land classified as marginal or of low productivity; to develop income and employment opportunities for rural agricultural areas; to develop and conserve the water and soil resources of Canada.

The Act itself takes the form of an agreement entered into by each province with the Government of Canada. Projects under this agreement will include those undertaken by the province in conclusion and agreement with the Government of Canada, and those undertaken jointly by the said government with a view to increasing oppor-

tunities for earning and to improve land use and productivity in rural areas, and will include projects for alternative uses of land, for rural development, and for soil and water conservation, and research.

The Government of Canada will contribute financial or other assistance or both, as may be mutually agreed upon. The Canadian Government's contribution to the "shareable" cost of a project may be one third, one half, or two thirds, according to whether the project is one in which "local and provincial are primarily involved", or one in which "there is a strong mational interest", or is of a special type (i.e. "involving the purchase for transfer to community pastures of lands which may be marginal or sub-marginal").

An idea of the financial scale of ARDA is given by the clause which states that, "the total national annual contribution of the Government of Canada shall not exceed twenty million dollars in any one fiscal year, or fifty million dollars over the term of the agreement".

TYPES OF PROJECTS

In keeping with the intention to rely on local initiative, the types of projects eligible for financial aid under ARDA are described only in a general way, as follows:

SCHEDULE "A"

"Designated projects for the alternative uses of land may include:

(a) (I) projects to establish association, co-operative group or community pastures;

(II) projects to encourage the establishment of pastures by farmers on marginal lands;

(III) projects to acquire marginal or other related lands for forestry purposes — for Crown or provincial forests, for municipal forests, county forests, or other public forest management areas;

(IV) projects for the acquisition and planting to trees, where necessary, of lands that are designated as marginal or sub-marginal agricultural lands, for

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long-term management and tree production:

(V) projects to acquire marginal lands for assembly to lease to adjacent farmers for forestry purposes to promote diversified economic forest farm units:

(VI) projects to assist in the establishment and maintenance of farm woodlots, including assistance in planting, thinnings, access trails to woodlots, management planning, and other woodlot extension services;

(VII) projects to acquire marginal and other related agricultural land for public recreational purposes;

(VIII) projects to acquire marginal lands for public shooting areas, wildlife management areas, or to lease or acquire easements on such lands from farm owners for public use;

(IX) cost-benefit, physical, social or economic studies, or other related studies on any projects under this section;

(X) projects for the training, relocation and re-establishment of people from marginal and sub-marginal lands affected by projects under this section;

(XI) such other projects for the alternative uses of land as are agreed from time to time by the Minister and the Provincial Government.

SCHEDULE "B"

"Designated projects for soil and water conservation may include:

- (a) projects for drainage of good arable farm land:
- (b) projects for protection of such lands from flooding, including dykes, main ditching systems, stream improvement, flood control dams, etc.;
- (c) projects for the supply of water for agricultural purposes, including water storage, dams and dugouts;
- (d) multiple use water development projects on a river valley watershed or local area basis, provided a major part of the project serves agricultural and rural development purposes; that where local interests directly benefit they pay a share of the cost, and the Government of Canada under this Agreement will share only to the extent that the project serves agricultural and rural development purposes;
- (e) projects for shelterbelts and other soil erosion control measures;
- (f) projects for stone removal on good arable land, and for grassing and terracing to prevent erosion;
- (g) projects to maintain water levels for stability of agricultural production and related flood control, wildlife and recreation purposes;
- (h) engineering, economic, including cost-benefit studies or other related studies on any projects under this section:
 - (i) such other projects under the in-

tent of this section as may be agreed from time to time by the Minister and the Provincial Government.

SCHEDULE "C"

"Designated projects for rural development may include:

- (a) Projects for the extablishment of Rural Development Areas, the establishment of Rural Development Committees and Rural Development Studies, including:
- (I) studies of present land use and land capability for various purposes;
- (II) studies of resources use, integrated resource development, or resource development opportunities for increasing income in the Rural Development Areas, including pilot projects;
- (III) studies of needs in Rural Development Areas for soil and water conservation projects;
 - (IV) rural sociology studies;
- (V) economic studies, including marketing studies;
- (VI) studies of employment, labour, underemployment and vocational training needs;

(VII) studies of off-farm employment opportunities and industrial development opportunities.

- (b) Development projects arising from the rural development plans as agreed upon by the Minister and the Province. Rural development plans may include projects for the acquisition and development of marginal lands; projects for soil and water conservation of a multi-purpose character; watershed development projects; projects for the re-establishment of people now living in rural development areas, including training and re-establishment assistance; projects designed to increase income opportunities; and other related projects approved by the Minister.
- (c) Rural Development Officer services, including training of such officers and including pro-rated salaries or wages in respect of their actual employment in Rural Development Areas designated by agreement.

SCHEDULE "D"

"Designated projects for provincial research may include:

- (a) studies aimed at evaluating the present provincial land use pattern with a view to establishing criteria and priorities for action under ARDA;
- (b) provincial or regional rural land use, or land capability studies; or recommended land use studies;
- (c) provincial or regional social and economic studies concerning rural development or rural adjustment;
- (d) studies aimed at predicting future land use needs or market requirements for production from lands in rural agricultural areas;

- (e) studies aimed at delineating areas of low productivity;
- (f) such other research projects as are agreed upon under the Act."

THE YEAR IN RETROSPECT

The latest estimates of the yields of the principal field crops in Quebec indicate that they have been above the average this year. The hay crop was good both in quantity and quality, and there were only very few localities where it was scanty. The price of hay is high owing to lively demand by neighbours to the south and east of this Province: reserves are therefore expected to be low next spring.

The physical impossibility of ploughing in the fall of 1962 resulted in a slight reduction in the area sown to grains in the spring of 1963. However, the average yield per acre was higher than the mean for the past five years, and approximately fifty million bushels of grain were harvested in Quebec. Notwithstanding the difficulties of harvesting this crop in good condition in some regions, and in spite of minor afflictions, it appears that the colour of the grain has been more affected than its quality.

Mr Nazaire Parent of the Quebec Department of Agriculture and Colonization urges those farmers who propose to use home-grown grain for seed next spring to have its powers of germination tested during the present winter. For this purpose, the Department makes available to them, free of charge, at the Institute of Agricultural Technology of La Pocatière in the County of Kamouraska, the services of experienced personnel who will provide necessary information about the germinative powers of samples of grain sent to them for testing. The slogan announced by the Department of Agriculture and Colonization for the coming year is, "Let us harvest more grain from our own fields".

Thanks to a fairly good distribution of rainfall, to an increased acreage of improved pasture, and to a growing season lasting well into the fall, the yield of pastures was very good. To sum up, the three basic productions of our farms show a progressive trend following more generous application of limestone and other calcareous amendments which counteract soil acidity, and more rational use of concentrated commercial fertilizers that provide the plants with essential nutrients.

It remains for us to thank Providence for the benefits we have enjoyed during the past year, and to draw up a good cropping plan supported by judicious use of manure and fertilizer, for next season.



A PROSPEROUS FARMER

The art of fishing calls for maximum concentration on the part of Suzanne, daughter of Maurice Vezina of St-Michel, Bellechasse.

Maurice Vézina of St-Michel in the county of Bellechasse began to operate his small ancestral farm in 1947, when he was 23 years old. Realizing that he would need more land in order to farm economically, he has bought neighbouring property which was not being worked, and now has 218 arpents, 178 of them under cultivation. While recognizing the need to have enough land, Mr Vézina also realized the importance of raising productivity to a satisfactory level: he has therefore put much money, toil and skill into doing so. Using modern machinery he has removed rocks, levelled mounds and filled hollows and, when necessary, laid tile (knowing that adequate drainage is a basic improvement without which some soils will never fully respond to cultivation and the application of fertilizer and lime). As regards enriching his soil, Mr. Vézina, in the first place, takes good care of his manure which he stores in a tight pit. Next, to supplement it, he buys the kind and amount of fertilizer he needs. At present (1962) this amounts to nine or ten tons a year of various formulas such as 4-24-20, 2-16-6, and 5-20-10, applied according to the nature of the soil and the crop. He has found, for example, that oats will lodge if given fertilizer too high in nitrogen; that phosphoric acid and potash will make oats strong and heavy and benefit clovers and alfalfa: that a complete fertilizer with a high percentage of nitrogen is suitable for grasses, potatoes and even grains, if they are sown in light soil. He has also found that soil acidity paralyses the beneficial

effect of fertilizers. Hence he has limed his land since the year he began to farm it.

The use of selected seed of recommended varieties is another factor of success which he has not lost sight of. His forage mixtures contain Climax timothy, Lasalle red clover, Vernal alfalfa, Ladino clover, and brome grass. Vernal alfalfa is very hardy and will persist where other varieties would disappear in their first winter. Climax timothy and Lasalle clover give better yields than ordinary unimproved seed of these plants. Ladino is a perennial legume much recommended for pastures.

Mr Vézina takes special care of his pastures, and with good reason: they provide his cattle with a complete ration at the lowest possible price. He works them on a six-year rotation; that is to say he rejuvenates one sixth of their total area every year. The portion to be rejuvenated is fertilized and limed, and seeded with oats and an undersown forage mixture. The oats are grazed down when a few inches high. The rest of the pasture land is treated with manure and commercial fertilizer in alternate years. Controlled grazing is another way of obtaining rich pasture from a persistently green and succulent sward. To this end, Mr Vézina has divided his pasturage into eleven fields which his cattle graze in a regular sequence. Managed thus, the 38 arpents of pasture, together with the aftermath of the hayfields, carry about forty head of cattle and, with the addition of a small supplement of meal, maintain the

cows in condition to give their maximum yield of milk. It is even possible to fill a $24' \times 12'$ silo with an early cutting of clover from one of the fields.

The fields of grain and hay are farmed according to a rotation of four years, one in grain and three in sod. Each year, a treatment of a few hundred pounds of 2-16-6 fertilizer is applied to the oats, and manure is spread in the fall on the oat stubble and on the third year hayfield. This system results in high yields that definitely reduce feeding costs. In 1961, forty-five arpents of Garry oats yielded 2900 bushels, and 102 arpents of grassland yielded 300 tons of hay.

In addition to the crops already mentioned, there are four arpents of potatoes, half an arpent of strawberries and a kitchen garden. The woodlot of 40 arpents is kept clean so that undergrowth does not limit the growth of useful timber. Managed in this way, in accordance with the best principles of sylviculture, a woodlot represents a valuable capital asset. Like most farmers in Quebec, Mr Vézina raises grain and forage with a view to furnishing feed for dairy cattle in the form of a basic ration of grass, hay, and bestquality silage. Thanks to the high proportion of legumes in his swards, he is able to complete this ration with concentrates having a protein content of only 14% (instead of the 16% or more required when poor hay is fed). Thus he effects an important economy as regards the protein components of the ration — which are much more expensive than the energy-providing constituents. The pastures and crops are sufficient for one work-horse, two bulls, 36 cows, 29 heifers, and six calves (Holsteins). There are also 300 head of poultry.

The quality and desirable hereditary traits of livestock and their capacity to

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convert feed profitably into marketable produce are factors which are as important for success as is balanced feeding. Mr Vézina therefore strives to improve his animals by judicious selection and the use of outstanding bulls. He also keeps his cows on R.O.P. tests, and is thus able to feed and tend them according to their merits and get rid of "boarders" and replenish his herd with the daughters of high-yielding dams. His cows have already attained BCA's of 106 (milk) and 107 (fat). One young cow has a production record of 17,000 pounds of milk. In 1962, the milking cows were classified as follows: VG, three; Good Plus, nineteen; Good, nine; and five not yet classified.

Mr Vézina has managed to break into the fluid milk market. This is harder to do than some people imagine: for example, he was once compelled to stop shipping milk to the dairy because of a serious illness that reduced him to reliance on outside help, with the result that the bacterial counts of his milk received from the dairy indicated from two to three times the tolerated level. After recovering from his illness, he took matters in hand and the dairy was not long in re-allotting him his quota of 95 to 100 cans a week (since he had hitherto been one of the most scrupulous suppliers). He had simply resumed once again his former hygienic measures: washing the cows' udders before each milking machine in a disinfectant solution. The milk-house adjoining the barn, equipped with two cooling tanks and hot and cold water supply, also contributes to elementary hygiene and the satisfactory keeping of milk. Good order is also observed in the barn; walls freshly whitewashed, an automatic stable cleaner, controlled ventilation and, last but not least, suitable arrangements for good management and feeding.

Mr Vézina is a prosperous farmer, in no small measure because he has adapted his farming to modern requirements: abundant and economical production sold at profitable prices. He is in a position to ensure the comfort and security of a family of seven; grandmother, father and mother, three charming daughters (one of whom is depicted in the accompanying photograph) and a vigorous son. These happy people dwell in a very old, though modernly appointed house which was already there when Wolfe's soldiers passed that way over two hundred years ago.

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This heifer on the farm of Eugene Ouellet of Notre-Dame-du-Lac, Temiscouata, promises to become a profitable cow.

WHAT IS A PROFITABLE COW?

It is generally admitted nowadays that one must consider a great many things when trying to decide how profitable a diary cow is. Mr Adrien Côté of the Quebec Department of Agriculture and Colonization lists the more important of these factors as follows:

1. Milk yield in relation to the animal's weight; 2. Richness of the milk; 3. Her fecundity; 4. Conformation; 5. Resistance to disease; 6. Ability to transmit her good qualities to offspring.

Doubtless the chief standard for judging whether a cow is profitable or not will always be the quantity of milk she gives in a year. However, to be quite fair, productive capacity should be considered in relation to the weight of the animal. Any cow that yields between eight and nine times her own weight in milk a year is a very good producer.

The richness of the milk is another factor that must be considered. Apart from questions of cleanliness and hygiene, the quality of milk also depends on the quantity of nutrients it contains. Since it is only logical that there is a relationship between the quality of a product and the price paid for it, the aim should be to produce milk with a sufficiently high total nutrient content.

To be profitable, a cow must also have a high degree of fecundity. This means that she must be prolific. Her annual cycle should be as follows: 10 months of lactation, 2 months rest, and a calving every year at about the same date. In this way, the animal will be able to give the highest possible yield of milk per day of her life. In the case of cows that regularly require two or three services before they conceive, calvings are delayed and, even if their

lactation periods are prolonged, they will yield less milk in their lifetime.

Conformation or type is another factor affecting profitability of dairy cows. The main reason for this is that conformation is correlated with length of life. The animals of good type are usually the ones that live the longest, and, generally speaking, a long-lived animal is more profitable. Thus, it has been found that a cow that goes on producing milk until she is ten is three times as profitable as one that only produces till she is six. Furthermore, in case of sale, animals having good conformation always fetch a higher price.

If a cow is to be worth keeping, she must be reasonably hardy and resistant to disease. It appears that all cows are not alike as regards their resistance to mammary and reproductive disorders, acetonemia, and milk fever. An animal that is always healthy is much more profitable to keep.

Finally, in assessing the merits of a dairy cow, it is important to consider her ability to transmit good qualities to her descendants. An animal which bears good offspring is worth more than one that produces poor progeny. In a herd possessing such prepotency in a high degree, the number of animals to be eliminated each year is much smaller and it will be easier to build up families of good milkers.

Since the foregoing factors all affect the profitability of a dairy cow, the owner should take them into account in his work of breeding and selection. They should also be weighed up by anyone who is buying a new animal to add to his herd, and used as a yard-stick in culling the herd with a view to making it more profitable.



The Better Impulse

NEWS AND VIEWS OF THE WOMEN'S INSTITUTES OF QUEBEC



Let's Prepare for 1967

by Estelle A. Coates Q.W.I. Convenor of Agriculture

967, THE 100th YEAR of Canada as a nation, will be the biggest birthday anniversary in our time. It is a combination birthday party and anniversary — the anniversary of the birth of a nation — a nation abounding in beauty and wealth that has attracted peoples from many lands and cultures to settle across its broad face and to call it home. Will we be ready for it? We must, as for any other party, make preparations. Because of the enormousness and importance of the celebration we must begin now to make plans. The fact that the World's Fair will be taking place here in our own province of Quebec makes it doubly imperative that we be well prepared to receive the guests that will be thronging through our area.

These events are going to be bigger than anything any of us have had before and will involve a great deal more time in preparation, a great deal more people to help and a great deal more work. It will involve every one of us from the smallest and most remote community to the larger and busier centres. It will involve every householder in our province.

What are some of these plans we can make to get ready for thi pasrty? Here are a few suggestions that may be helpful to you.

First we must begin by cleaning up. We do not want our guests to find that we don't care about the appearance, neatness and natural beauty of our surroundings. Perhaps the best place to start with this clean up campaign is in our own individual yards and property. There will be three years on our side to help us improve and beautify our ewn personal surroundings. Do some of our buildings need painting or repairing in the next few years? Do we have a jungle of weeds and tall grass around our buildings that would look better

if they were cut down? Could our trees and hedges do with some trimming and pruning? Does machinery, old wire, tin cans litter the yard and fields in great disarray? Do we feel proud enough of our own homes to have our name plates at the gate for all to see? Do we have a stream going through our land? Is it becoming clogged with fallen trees or are we using it for a convenient dump? By cleaning up the stream we can provide our own private picnic spot and beauty corner. Most of these improvements need not involve a great deal of money gut will take time and energy.

Our children usually have lots of energy and are wonderful help when it comes to clean up campaigns. Try them out and just see what an enthusiastic family group you will have for your project.

Besides the individual home project there will be the branch project. Remember when you have guests you usually take them to points of interest in and around your community. Do you have things nearby that are worthwhile to show them. If not, could you not have one? Are there streams, rivers, lakes, lovely wooded glens in your area that would lend themselves to a park land? Once a suitable area is selected then provide toilet facilities, drinking water, picnic tables, fireplaces, litter barrels, etc. Get your community interested.

What else in your community would your guests find of interest? Is it a community steeped in history? Do you know your local history? Is there an old building nearby that once housed fur traders, that was a stopping place for the stage coach travellers, or was beseiged by warring Indians? Is it in use? Is it worth restoring? Why not develop such buildings into a museum to record and keep alive your community's history? Possibilities are unlimited and what better time than these next three years to develop our own historical sites in our community landscaped and kept attractive I hasten to

When we have done all we can as

individuals to improve and beautify our own home surroundings, and as a group to establish and improve facilities and sites in our community, let us look to the scenes that meet our eyes as we travel along our roads. Are we proud of our lovely Province of Quebec? Have we, or our county officials, allowed the weeds to grow rampant along our roadsides? If spraying has been done, have unsightly but very dead trees been left standing as a monument to our progress? Are our lives in danger at every corner through a lack of road signs (Stop, Yield), or through a lack cleaning away underbrush that blocks the view? Are our highways and streams becoming littered with papers, bottles and cans? Besides cleaning up these areas, could we erect anti-litter signs and provide litter barrels along our roadways? And what about those dreadful "dumps", such a blot on our landscape?

You see we have a great deal to do to get ready for our big celebration. It will take all of three years of planning and steady work but I'm sure we can do it. Every branch of our organization should establish a "Making Quebec Lovelier" committee now. They might find that they have such a huge and glaring problem in their community that they will need the help of their local, provincial of federal governments. These bodies usually need more time to get at a problem so start now to get that help if it is going to be needed. This is no time to sit back and become complacent.

In our centennial year let us strive to make our community interesting, a joy and a safe place in which to live and visit. Let our centennial year be treated as a personal celebration of ours and our community. Are we worthy of our lovely Canada? We have been entrusted with its beauty. Can we show with pride what we and our community are, and have been doing, to maintain and enrich it? In our homes and in our schools we must train our children to keep our country clean and tidy - and remembering we must set the example ourselves.

THE MONTH WITH THE W.I.

All reports reflect the spirit of joy and the spirit of giving that go with the holiday season. Most branches had something of Christmas in their meetings — with carols, gift exchanges, how to wrap gifts, or make candles, or prepare special foods, stories, readings, traditions, special guests, parties for children or adults — everything from a Box Lunch Party to Musical Charades. Toys, gifts, food, clothing, plants and money given to newcomers, sick, shutins, the needy, hospitals and homes, as well as to our own special projects.

More UNICEF cards and notes sold, and donations given by East Angus, Wakefield, Dunham (\$50 Halloween), Shawville, Beebe, Minton, Harwood (over 100 boxes cards

and notes).

UNESCO Project #367: Gift coupons purchased by more branches: Lower Eardley, Wakefield, Bristol, Shawville, Elmside, Dunham and Wyman.

ARGENTEUIL: ARUNDEL's speaker, County President, Mrs Stephens. BROWNSBURG completed 6 weeks course in Physical Fitness, instructor Mrs. Dan Barbour, Lachute; antiques and heirlooms owned by members on display. BONAVENTURE: BLACK CAPE: papers on Earthworms in the Lawn, Herbs and their Uses, Immigration and the New-Comer. GRAND CASCAPEDIA sent parcels to UNICEF; gave grocery shower for family with sick father. MARCIL and PORT DANIEL are serving soup to school

BROME: AUSTIN: pictorial calendar sent to English group; memorial to the late Pres. J. F. Kennedy read; KNOWLTON'S LANDING held a successful oyster supper. SOUTH BOLTON discussed subjects for Leadership Course, as did SUTTON. Some Sutton members work at Public Library,

where their contribution is appreciated.

children for winter months.

CHATEAUGUAY-HUNTINGDON: AUBREY-RIVER-FIELD held special quilting meeting, with pot-luck supper, quilts sent to Welcome Home Mission. DEWITTVILLE: held successful annual Nearly-New Sale; toured Avon Products plant; held course in Leathercraft; Mrs Bulow talked on Seminar attended at Macdonald; Music Appreciation evening enjoyed, under Mrs F. G. McCrimmon, Huntingdon. DUNDEE sents books to West Indies, clothing to Unitarian Service. HEMMINGFORD celebrated 40th Anniversary. HOWICK: heard Home Economics teacher, Mrs Mattinson; demonstration of Spoon Bread, Flower Pot Bread and Teatime Kringle. HUNTINGDON: demonstration of fancy Christmas yeast breads.

compton: BROOKBURY held Shamrock Contest; BURY observed memorial silence for their late President, Mrs. R. N. Mayhew; donated to Student Loan Fund in her memory; sewing courses under Mrs. Wells held. CANTERBURY contributed to bursary for student nurses. EAST ANGUS held paper drive; slides on Beirut and the Holy Land; entertained Lennoxville Branch; held sewing course with Mrs. Wells; donated to student loan fund (Mrs. Mayhew). EAST CLIFTON entertained teachers and parents at supper; donated school prizes. SCOTSTOWN: slides of overseas trip, by a member. SAWYERVILLE held a Guest evening and social hour much enjoyed.

GASPE: MURDOCHVILLE held panel discussion on a) how to make new families welcome, b) how to help our community spirit c) separatism d) Christmas help for needy children. WAKEHAM sent knitted articles to Save the Children Fund, held Children's Masquerade. YORK welcomed new member; held card party and annual Children's Masquerade; Roll Call named an important event of the month.

GATINEAU: AYLMER EAST observed 38th Anniversary, with 2 charter members present, local teacher spoke on this profession, led a spelling bee. EARDLEY: Mrs Frank Connor and Mrs E. Watson spoke on the Canadian Indian, and on UNESCO Gift Coupons; slides shown by Mrs Watson on her trip to South; books sent to West Indies. LOWER EARDLEY held dinner party to celebrate 10th Anniversary; RUPERT: Col. McIntyre from Kirk's Ferry showed slides on trip to Europe and British Isles; Roll call-name a famous Canadian woman. WAKEFIELD: Mrs T. Main spoke on "Importance of Keeping Our Children in School"; canvassed for Canadian National Institute for the Blind. WRIGHT sold poppies with funds given to Hull Legion. JACQUES CARTIER: St. ANNE'S donated to CARE. LAKE OF TWO MOUNTAINS: OKA welcomed prospec-

tive members to their Christmas meeting and Party, and held Children's party; course in Leathercraft enjoyed. MISSISQUOI: COWANSVILLE: Mrs. W. D. Smith spoke on high entrance requirements for College; talk on rising cost of living; discussion of drug-vending machines; delegates attended meeting for projected district social service plan. DUNHAM: Mrs H. Smith gave demonstration refit-

ness; held successful sale and tea to assist Girl Guides.

PAPINEAU: LOCHABER considered Nursing Problems; original gift wrapping prize won by the parcel in the shape of a star, with thhe gift placed between the lining, and the silver covering; entertained a visitor from Holland, President of her Institute at home.

PONTIAC: BRISTOL: Mrs Jacques spoke on Mental Health; contest on health advertisements; "Musts" for a medicine chest; slides of member's trip to Japan; poppies sold an wreath placed at Cenotaph; Mr Raymond Rowat spoke on laws for married women in Quebec. CLAREN-DON learned of history of "The Mail"; read letters mailed from Ireland in 1854 and 1855 which took over a year to reach Canadian destination; collected for Canadian National Institute for the Blind; address by Mr W. Stephens on the United Nations as delegate on the Youth Pilgrimage; entertained husbands and friends, ELMSIDE and STARK'S CORNERS with their husbands; travelogue of scenes across Canada. ELMSIDE: readings on a) blood tests b) what TV violence can do to your child; held card party; each member wore an apron, which was judged, then sold for WI funds. FORT COULONGE: Rev. W. C. Inglis spoke on preparation for the ministry, and of his trip to Scotland; jams and jellies sent to Pontiac Community Hospital. QUYON exchanged Household Hints; reading on wool "From Lamb to Loom"; booth at School Fair; Mrs Landry spoke on work of Cancer Society, showed films and gave much helpful information; French Classes for adults organized and running well; school prizes given — for French in the English School, for English Composition in the French school; assisted at Quyon Fair. SHAWVILLE: Mrs Jacques spoke on Mental Health; Mr Donald Dodds on Dry Cleaning; Miss Beverley Street, of White Pine Bureau Canadian Lumberman's Assn., on Canadian Pioneer Buildings, with slides; collected \$317 for C.N.I.B.; books sent to West Indies; exhibited at Shawville Fair. STARK'S CORNERS held Ceramics course with many excellent articles completed; clothing sent to Save the Children; Roll Call something different in class from our school days. WY-MAN: Making of lampshades demonstrated by Mrs Belshor and Mrs McDowell, delegates to Leadership Course; celebrated their 50th Anniversary with a social evening; original minutes were read, and names of early officers; album containing pictures dating back to first meeting was on (continued on page 20) display.

ALONG THE MACKENZIE

first of two parts
by
Florence P. Eadie

In this two-part article, Miss Eadie gives a fascinating account of her visits to WI's at Fort Smith, Inuvik, Fort Good Hope, Tuktoyatuk, Fort Norman — and of exploratory visits to Fort Resolution and Fort Rae. Take a look at these places on a map, and you will realize how far we have spread toward the North Pole... and she tells of seeing glorious flowers and vegetable gardens!

west Territories! Immense! The Yukon and the Northwest Territories one-third the area of Canada! A country, as I saw it, with barren rugged stretches spotted with lakes, some wooded sections, magnificent sunsets, spectacular northern lights, horizons etched with pines or just barren ruggedness, and over all the sky an ever changing panorama of clouds, intriguing and beautiful. Everywhere there was an air of freshness, a sense of leisure and freedom from rush and pressure of many things, which was relaxing and altogether delightful.

This country, sparsely settled in the past by courageous, resourceful, struggling people, is now a land of promise, high hopes and expectations for the future. Centuries ago venturesome explorers pushed into the unknown charting the way for those who came after. There have been great changes in the last 100 years, more since the war, with tremendous changes in the last ten years and now continuing day by day. Communications, planes, explorations, services, supplies and modern equipment have been expanded and extended to remote areas, changing the former pattern of living of the natives throughout the country. This has brought opportunities and some problems, calling for continual adjustment to the new. Advantages and opportunities in terms of education and health with increased span of life, to mention only two, indicate the direction and importance of government leadership and service.

The opportunity for education is now available to all or most Indian children and reaching out to an ever increasing percentage of Eskimo children. Adult Education is being featured and rehabilitation centres established in various places. It is a country of great possibilities for those who live there—the natives, newcomers from other lands and parts of Canada, and for those in business, industry and special

fields of leadership in Church and government.

These are some of the things uppermost in one's thoughts after all too short a time in the Mackenzie District, travelling in the vicinity of Slaves River, Great Slave Lake and along the mighty Mackenzie itself. One will remember always with great joy the hospitality, courtesies, kindliness and interest on the part of the people everywhere—their patience in answering endless questions, the warmth of their welcome and their friendliness.

Leaving Edmonton one flew some 600 miles in two hours to Fort Smith in the Northwest Territories, just north of the Alberta border. Except for a 70 mile trip out from Yellowknife by truck to Rae, an Indian settlement, and return by car, one travelled altogether by plane on regular flights, or by local services. To find oneself at Tuktoyaktuk at the top of Canada. An Eskimo village on the Beaufort Sea some five hours flight from Fort Smith via Inuvik, was both thrilling and unbelievable.

At that particular spot on the map, it is the top of Canada, but one soon was reminded of the islands to the west and north, reaching on hundreds of miles. Travelling in smaller planes to Tuk from Inuvik, Fort Norman, Fort Good Hope and Resolution to Yellowknife, one could see the countryside beneath; vast stretches of barren land with lakes, some of the lakes dotted with small islands, with variegated vegetation and trees adding a touch of color to otherwise somber scenes. Then there was a monutain not too far away it seemed, glorious, with everchanging pattern of light as we winged our way to Fort Good Hope.

Arriving in September one immediately became aware of schools, met teachers, lived with them in their houses or apartments over the school, heard and watched throngs of happy, comfortably clad, healthy appearing chil-

dren burst through school doors for a rollicking recess. Children of all races attend school together. The modern, recently built schools at Yellowknife. Inuvik, Fort Smith and other centres, have hostels for pupils. The living and sleeping quarters, dining room, sparkling well equipped kitchens, gymnasiums, chapel, and all the things that go with a school or college residence anywhere, revealed the most worthy and ambitious school program of the Northern Affairs and National Resources Department. Along with classes the pupils enjoy all kinds of recreation and a happy social life.

The pupils are airlifted to schools from outlying places, often great distances. Flying in, in September, they remain until the end of the school term in June. Eagerly the younger ones pointed out on a map their home spot, miles and miles away, as Sac Harbour on Banks Island beyond Tuk, or Copper Mine east of the Mackenzie. The older boys and girls were shy and more reserved but friendly, inquiring if we had expected to see igloos all over the north. Like girls everywhere hairdo's and grooming were important. The boys were equally well groomed. Clothes are given the pupils on their arrival at school and a spending allowance.

Generous grants are available for students to go on to university if they show the capacity for continuing studies. Vocational training in various areas is available for both youths and adults. There are, as well, local schools for younger children but if a family spends weeks on the traps they may send children away to school. As it is, many children are taken out on the traps with parents for weeks at a time.

The educational program is a tremendous undertaking, making available schools to children many of whose parents never attended one themselves. Some parents have, of course, attended mission schools. Taking children from

(Please turn page)

FARM FORUM NEW'S 'N VIEWS

by Galen Driver

T SEEMS LIKE only yesterday that we were planning for this season's broadcasts and looking forward to the first program. How time flies by and we now can easily see the end of a Farm Forum season.

We've had good response in Quebec this year. A few more forums met. Everyone we talk to thinks highly of Farm Forum, and people in general are becoming more interested in adult education. We have discussed the Rural Church, Heritage, Women in Society, Cost of Debt, A.R.D.A., Farm Insurance, Rural Youth Face the Future, Farm Organizations and Marketing. This is quite a list of topics and interest has been keen.

As soon as anyone says, A.R.D.A., everyone stops short and is ready for a talk; everyone wants to learn more about this program which is still poorly understood by many. When the Forums discussed this topic, there were still requests for all the information available. The ARDA program has been going awhile but still not everyone knows just what to expect.

Almost every Forum is interested in undertaking rural development projects auch as (a) drainage, clearing and developing rough land, — (b) reforestation, — (c) community pastures, — (d) public recreation beach, — (e) picnic areas, — (f) campsites, — (g) adult education program, — (h) improved educational facilities. These are all very useful projects and with local and other assistance, at least, some of these certainly can be accomplished.

One question asked, "How can A.R. D.A., help your Community". These suggestions were offered, — "Give us technical and financial help." — "AR DA can help our community by taking a soil and land-use survey." — "By sending technical aid to help with projects" — "Give us research on marketing, milk and beef." — "Increase Farm Credit in good agricultura lareas."

Most groups felt that A.R.D.A. could strengthen community organizations because a real community project should involve a cross-section of the people, and by working together everyone should benefit.

Interest was high for the program, "Rural Youth Face The Future". Parents want their children to have the education that they require. The big problem seems to be for the student to pick the best career. This is where our schools were criticized. There seems

to be a great shortage of information on careers and vocational guidance instruction in our schools. For students who are unable to complete high school, more technical schools are required. Several groups suggested a regional high school might be one answer, so that more subjects can be taught to interest more students. We must find some solution to the problem of high school "drop-outs".

MONTH WITH THE W.I.

(continued)

QUEBEC: VALCARTIER is providing milk for local school children.

RICHMOND: GORE: Richmond County WI Cup presented to Mrs. S. Husk for 1st prize on men's stockings, at Richmond Fair; clothing sent to Unitarian Service; magazines given to school for class use; two new members welcomed. MELBOURNE RIDGE is making layettes for service group. RICHMOND HILL have made several quilts. SPOONER POND: corsage contest won by Mrs. N. Noel and Mrs. H. Blanchard.

ROUVILLE: ABBOTSFORD sponsored the swing course, given by Mrs. Wells, — enjoyed the teacher and the many articles made.

SHERBROOKE: ASCOT auctioned handmade articles at their meeting. BELVIDERE held paper drive; knit socks for local welfare agency. BROMPTON ROAD held discussion on new invisible thread; catered to Ploughman's luncheon and Rotary supper; ran canteen at an auction. LENNOXVILLE sent books to West Indies; visited East Angus Branch. MILBY: Mrs E. Langlois showed slides and gave Red Ensign as official Flag for Canada.

STANSTEAD: AYERS CLIFF entertained County President, Mrs. Lemon. BEEBE entertained teachers, had talk on Mexico by Mrs. Lemon. Card party held, proceeds to newly-formed kindergarten. HATLEY sent donation to Lady Aberdeen Scholarship, donated to 2 local Sunday Schools. MINTON: travelogue on Western Canada by a member and her husband.

VAUDREUIL: HARWOOD: Mr. Hamel, teacher at Dorion, spoke on the

intellectual and practical value of a second language; 3 bursaries presented to students at Macdonald High School, Dorion School and Vaudreuil School; successful card party held; musical evening enjoyed; toured Avon Plant.

THE MACKENZIE

(continued)

home for nine or ten months to live in an entirely different environment raises many questions. Some ask what will be in store for them after two, three or four years at school. Rev. Leonard P. Holman, Stringer Hall Hostel at Inuvik, quotes an Eskimo's answer to this: "Let's not worry about them and what. We will do with them, give them the education and see what they can do for themselves." It is indeed highly commendable that this big start has been made to give these Canadian citizens an opportunity for education.



Mrs. C.E. Petch and Mrs. W.F. Orr at the 40th anniversary of Hemmingford W.I.

HEMMINGFORD CELEBRATES 40th ANNIVERSARY

On November 27, 40 years to the day from the beginning of the Branch, Hemmingford held an Anniversary Tea and Program. The meeting honoured Mrs. C. E. Petch, first president of the branch, who has an unbroken record of active membership for the entire time. Also honoured was Mrs. G. M. Brown, with an active membership of 39 years. Mrs. W. F. Orr, member for 34 years, presented Mrs. Petch with a corsage. Messages of congratulations were expressed by the other branches in the County who were present at the tea. Letters from absent charter members and portions of the Branch history were read.

A collection of short items of news

1964 College Royal FEBRUARY 28, 1964 Panorama of Macdonald

For the past sixteen years, the Macdonald College Royal has placed its emphasis on the livestock show. We feel this emphasis is giving Royal visitors a false impression of the College's true purpose, that of training young minds in scientific agriculture, teaching home economics to young women and preparing young people for the teaching profession. Judging livestock and showing livestock has become a very minor phase of present day agriculture; 80% of our college students are not involved with it in their education, nor will they be in their future occupations. The Royal executive of 1964 has arranged practical demonstrations in many phases of agriculture

studied at college, thus providing an equal emphasis in every field, including that of judging and showmanship.

These displays will be set up in the Agricultural Building, the Chemistry Building and the Biology Building. Undergraduate and post graduate students will be present to explain these demonstrations and answer any questions that interested visitors may ask. To this end, we hope that Royal '64 will be of interest to a wide range of people and will give a more comprehensive view of the diversity of Macdonald College.

Many other shows and displays will give the public a Panorama of Macdonald. The booth display is a condensed version of the many diversified interests and aspects of student study and research. It will demonstrate to

you the application of new innovations in the fields of science and education, which may affect you and your future.

Fashions and foods are the speciality of Macdonald's fairer set who take Home Economics. They are planning a fashion show, cooking and clothing demonstrations, as well as displays of the newest equipment which will be used in the kitchens of tomorrow.

Physical fitness is a basic and essential criteria for a healthy nation. The students in Physical Education will be instrumental in improving the fitness of our next generation. They have planned a dynamic display of gymnastics and acrobatics — a spectacular demonstration of their training and ability — a show that must be seen to be appreciated.

In the field of education, students will display the latest methods and aids in teaching which are revolutionizing the science of learning.

An appropriate climax for an unforgetable day is the students' presentation of the Green and Gold Revue — a musical comedy written and directed by the students — we know you will enjoy it.

Royal Program

9:00 a.m.	Opening of Livestock Show
10:00 a.m.	Official opening, crowning of Queen
	announcement of winning booth
10:30 a.m.	Welcome to High School Students
11:00 a.m.	Physical Education Display
11:45-1:00 p.m.	Dinner, Dining Hall
1:00 p.m.	Livestock Show
1:30 p.m.	Fashion Show
1:30 p.m.	Square dance display
2:00 p.m.	Second physical education display
3:00 p.m.	Champion livestock showman competition
3:00 p.m.	Second Fashion Show
3:00-5:00 p.m.	Royal Tea
5:15-6:30 p.m.	Supper, Dining Hall
7:00 p.m.	Presentation of Awards
7:30 p.m.	Green & Gold Revue

Livestock Pavillion Assembly Hall

Assembly Hall
Stewart Hall Gym
Stewart Hall
Livestock Pavillion
Assembly Hall
Stewart Gym
Stewart Gym
Livestock Pavillion
Assembly Hall
New Dining Hall
Stewart Hall
Assembly Hall
Stewart Hall

Continuing Events

Agricultural Displays featuring:

Agronomy Animal Science Bacteriology Chemistry **Economics** Entomology Horticulture Plant Pathology Art Display Audio-Visual Display Extension Service Display Foods Display Home Economics Lab Display Inter-option Booth Display Machinery Display Student Organization Displays Textile Clothing Display Women's Institutes Display Student Publications Display

Agricultural Building Agricultural Building Biology Building Chemistry Building Agricultural Building Biology Building Agricultural Building Biology Building Main Building Main Building Main Building Main Building Main Building Brittain Gym Glenfinnian Rink Basement, Main Building Main Building Basement, Main Building

Student Publications — Brittain Hall

NEW DIRECTOR RURAL DEVELOPMENT AT QUEBEC

Mr. J. C. Pelletier, B.A., B.Sc., formerly manager of the Agricultural Cooperative Society at St-Pierre, Island of Orleans, has recently been made technical adviser to the Quebec Department of Agriculture and Colonization and appointed head of the rural development service and co-ordinator of planning under ARDA. He replaces Mr. Henri Dubord who has resigned for reasons of health.

Mr. Pelletier was born in 1908 at St-Octave-de-Métis in the county of Matane, where he later attended school. He subsequently took the classical course at the Séminaire de Rimouski and was awarded the degree of B.A. by that institution in 1929. Enrolling in the College of Agriculture at Ste-Annede-la-Pocatière in 1930, he obtained the Bachelor's degree in Agriculture (B.S.A., Laval) in 1933. After serving as assistant county-agronome at Charlesbourg until 1936, he was promoted to the post of agronome at Normandin in Roberval County and, in 1941, appointed specialist agronome of Montmorency County.

In 1948, the farmers of the Island of Orleans engaged him as managing-secretary of their Cooperative Society which, at that time, had an annual turnover of \$300,000. A few years later this figure had been increased five-

(Please turn page)

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NEW DIRECTOR

(continued)

fold, to \$1,500,000. Mr. Pelletier brought about the centralization of all the butter factories on the "Island of Bacchus" (as the Ile d'Orléans used to be called) thus welding them into a powerful butter cooperative. The refrigerated storage at "St-Pierre-les-deux-églises", in which a variety of products are kept — ranging from strawberries to meat, and even including eels — represents another of his achievements.

Mr. Pelletier's work in connection with ARDA promises to be arduous (if we may be allowed a pun). Our best wishes go with him. We believe that Mr. Courcy has made a happy choice.

ENTRE NOUS

The Consumers Association of Canada (Quebec) has just launched a new enterprise — the first issue of bilingual bulletin, "Entre Nous" — aimed at giving its members the latest news about good buys, safe products, what the Quebec consumer can do to help himself, and what he should expect his government to do for him.

This bulletin deals specifically with subjects concerning our own problems by giving news items about Quebec Branches, Quebec issues, and Quebec products. All items are not necessarily printed in both languages, so that the reader is encouraged to try his skill in each.

There is no extra cost to CAC members for this new service. They will receive several issues of "Entre Nous" in addition to the valuable national testing magazine, "Canadian Consumer", which is sent to all members six times a year — all for the modest fee of \$3.00 per annum.

Membership may be obtained by sending this sum to: Consumers Association of Canada (Quebec), 33 Ballantyne Avenue South, Montreal 28, P.Q.

NEW C.I.F. SECRETARY

Mr. David Irvine has become the new secretary-manager of the Canadian Institute of Forestry whose national office is located on the Macdonald College campus. Mr. Irvine replaces Mr. Jim Dosne who has accepted a position as Forestry Education Officer with the Food and Agricultural Organization of the United Nations in Rome. Mr. and Mrs. Dosne and their six children left for Rome in early November; Mr. and Mrs. Irvine arrived during mid-November.

THE NEW COUNTRY

(continued)

enough food for 27 people, where his father produced enough for only 11.

It means that the agricultural scientists have put more ingenuity, skill research and work into the creation of food, than was ever put into a rocket to the stars.

But whatever motive power or fuel man uses to get to the planets and stars, he will have to grow his own once he gets there. In the meantime the farmers and the agricultural scientists have a job to do in their own strange and exciting world — breaking new land into the "new country."

They know they may be called to triple production overnight in the most efficient business in Canada.

RESOURCE MANAGEMENT

(continued)

result in the re-alignment of thinking among the federal and provincial governments as they draw up future agreements, in line with the desire of the provinces to play an equal role in resource planning on the national scale.

The review will take into account the specific provisions of each agreement, such as their duration, distribution of costs, distribution of responsibilities, control and management criteria, budgetary implications, etc.

The study will take into account the conclusions and recommendations of the Resources for Tomorrow Conference, and will lead to specific recommendations regarding the aims of the joint programs.

The council also endorsed Canadian participation in the International Hydrologic Decade, 1965-75, as proposed by the United Nations Educational, Scientific and Cultural Organization.

Mr. Wermenlinger was appointed council representative on the proposed Canadian Decade Committee which will join with committees from UNESCO member countries in a concerted world-wide effort to gather much-needed scientific data on the water cycle.

At the conclusion of November's plenary session, Mr. Lévesque, as council chairman, reflected the confidence of the ministers in their ability to work as co-equals in planning for the future development of Canada's renewable resources.

"It is a new formula which has a chance to get somewhere," he said.